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REMARKS

In view of the following discussion, Applicant submits that none of the claims now pending in the application are non-enabling, anticipated, or obvious under the respective provisions of 35 U.S.C. §112, §102, and §103. Thus Applicant believes that all of these claims are now in allowable form.

It is to be understood that the Applicant does not acquiesce to the Examiner's characterizations of the art of record or to Applicant's subject matter recited in the pending claims. Further, Applicant is not acquiescing to the Examiner's statements as to the applicability of the prior art of record to the pending claims by filing this Response.

REJECTION OF CLAIMS UNDER 35 U.S.C. §103(a)

The Examiner rejected claims 1-5 and 7-8 under 35 U.S.C. § 103 as being obvious and unpatentable over U.S. Patent No. 5, 669,347, issued December 16, 1997 to Callon (hereinafter Callon) in view of the U.S. Patent No. 6, 304, 577, issued October 16, 2001 to Nagami et al. (hereinafter Nagami).

Specifically, the Examiner indicated that Callon discloses a method to establish a new virtual circuit to route packets across the connection-oriented subnetwork (backbone) from router 112 to router 122, wherein there is not a virtual circuit already existing. Allegedly, a determination is made at step 212 of Fig. 4 of Callon to find out if the virtual circuit in the backbone exists between router 112 and router 122. If not, a new virtual circuit is established at step 222 of Fig. 4. However, Callon does not disclose establishing a virtual link through a neighboring node of the router if a virtual link cannot be established through the router. The Examiner then continues by offering that Nagami allegedly discloses a network having unused virtual connections to neighboring nodes that are established and registered. When a virtual connection is needed, the registered, unused virtual circuit to the neighbor nodes is selected for use (thus establishing

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virtual links). Therefore, the Examiner concludes it would be obvious to one of ordinary skill in the art to combine Nagami with Callon by establishing unused virtual circuits in advance to the neighbor nodes to establish a virtual link through a neighbor node when there is not a virtual link established through the router. The motivation offered by the Examiner is to backup the unused virtual circuits and release the unused virtual circuits when not needed. The rejection is respectfully traversed.

The test under 35 U.S.C. § 103 is not whether an improvement or a use set forth in a patent would have been obvious or non-obvious; rather the test is whether the claimed invention, considered as a whole, would have been obvious. Jones v. Hardy, 110 USPQ 1021, 1024 (Fed. Cir. 1984) (emphasis added). Thus, it is impermissible to focus either on the "gist" or "core" of the invention, Bausch & Lomb, Inc. v. Barnes-Hind/Hydrocurve, Inc., 230 USPQ 416, 420 (Fed. Cir. 1986) (emphasis added). Moreover, the invention as a whole is not restricted to the specific subject matter claimed, but also embraces its properties and the problem it solves. In re Wright, 6 USPQ 2d 1959, 1961 (Fed. Cir. 1988) (emphasis added).

The references must be taken in their entireties, including those portions which argue against obviousness. Bausch & Lomb, Inc. v. Barnes-Hind/Hydrocurve, Inc., 230 U.S.P.Q. 416, 420 Fed. Cir. 1986). It is impermissible within the framework of the 35 U.S.C. § 103 to pick and choose from a reference only so much of it as will support a conclusion of obviousness to the exclusion of other parts necessary to a full appreciation of what the reference fairly suggests to one skilled in the art. Id. at 419.

For prior art reference to be combined to render obvious a subsequent invention under 35 U.S.C. § 103, there must be something in the prior art as a whole which suggests the desirability, and thus the obviousness, of making the combination. Uniroyal v. Rudkin-Wiley, 5 U.S.P.SQ.2d 1434, 1438 (Fed. Cir. 1988). The teachings of the references can be combined only if there is some suggestion or incentive in the prior art to do so. In re Fine, 5 U.S.P.SQ.2d 1596,

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1599 (Fed. Cir. 1988). Hindsight is strictly forbidden. It is impermissible to use the claims as a framework to pick and choose among individual references to recreate the claimed invention Id. at 1600; W.L. Gore Associates, Inc., v. Garlock, Inc., 220 U.S.P.Q. 303, 312 (Fed. Cir. 1983).

Moreover, the mere fact that a prior art structure could be modified to produce the claimed invention would not have made the modification obvious unless the prior art suggested the desirability of the modification. In re Fritch, 23 U.S.P.Q.2d 1780, 1783 (Fed. Cir. 1992); In re Gordon, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984).

Specifically, and with regard to each of independent claims 1, 3, 4, 5, 7 and 8, it is respectfully submitted that the claimed invention is recited with regards to configuration of a router running Open Shortest Path First protocol (OSPF). That is, the method and apparatus of the subject invention is directed solely to use and improvement of such protocol in a network architecture. Callon, on the other hand, presents specific teachings of an asynchronous transfer mode (ATM) subnetwork. Those of ordinary skill in the art understand that networks operating in accordance with ATM protocols are sufficiently different than those running OSPF protocol; hence, a direct correlation between the system of Callon and the system of the subject invention cannot be made. Specifically, it is known to those of ordinary skill in the art that OSPF does not operate properly or as intended in an ATM governed network. Applicant notes that one of the few basic criteria to establish a *prima facie* case of obviousness is that there must be a reasonable expectation of success. MPEP 706.02(j). Accordingly, it is respectfully submitted that Callon either alone or in combination with any other cited art cannot adequately suggest the claimed invention running within the confines and protocols of OSPF. Callon does indicate that other types of connection-oriented subnetworks may be used in accordance with Callon's invention (such other networks are offered as X.25, frame relay and POTS); however, there is no specific reference, teaching, disclosure or suggestion of OSPF. It is respectfully submitted that since it is known that OSPF and ATM

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cannot function together properly within a network and Callon offers no alternate teaching or suggestion otherwise, there is not a reasonable expectation of success that Callon, either singly or in combination with any other cited prior art, will result in the subject invention.

Another of the basic criteria to establish the *prima facie* case of obviousness is that there must be some suggestion or motivation to modify the reference or combine the teachings. While the Examiner has offered that Nagami discloses a network having unused virtual connections to neighboring nodes established and registered, such alleged establishing and registering is all handled prior to any of the processing, link utilization or data transfer in the network, "...the present invention has set up several VC's by ATM signaling in advance...", Col 2, lines 46-47. That is, Nagami is teaching the preprocessing setup of alternate links via neighboring routers whereas the subject invention is accomplishing alternate links as a condition of router connections. That is, in each of the independent claims presented above, there is a condition of router connections that first must be determined before virtual links are established via neighbor routers. This type of processing cannot be considered a preprocessing step as that presented by Nagami. Therefore, it is respectfully submitted that there is no suggestion in the references for establishing a virtual link through neighboring routers based on conditions of a router's connection.

Additionally, the motivation offered by the Examiner, "to backup the unused virtual connections; and release the unused virtual connections" is without merit because the subject invention does not operate in this manner. That is, the subject invention creates virtual links as it needs and does not allocate underused virtual connections and release virtual connections as taught by Nagami, (see Applicant's Summary, Page 4, lines 15-16 and each of the above-identified independent claims). By creating virtual connections as needed based on conditional situations, the subject invention is not overburdening the network or creating excessive amount of connections. As indicated in the background section of the subject application, at page 2, line 27-28, "(h)owever,

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excessive redundancy is not desirable, either because it increases router load and network traffic." Accordingly, the subject invention is counter intuitive to the teachings of Nagami. It is respectfully submitted that the combination of Callon and Nagami result in an ATM based network that creates an unnecessary amount of virtual connections.

As such, the Applicant submits that claims 1, 3, 4, 5, 7 and 8 are not obvious and fully satisfy the requirements under 35 U.S.C. § 103 and are patentable thereunder. Furthermore, claims 2 and 6 depend, either directly or indirectly, from independent said independent claims and recite additional features thereof. As such, and for at least the same reasons discussed above, the Applicant submits that these dependent claims also fully satisfy the requirements under 35 U.S.C. § 103 and are patentable thereunder. Therefore, the Applicant respectfully requests that the rejection be withdrawn.


CONCLUSION

Thus, the Applicant submits that claims 1-8 are in condition for allowance. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.

If, however, the Examiner believes that there are any unresolved issues requiring adverse final action in any of the claims now pending in the application, it is requested that the Examiner telephone Mr. Eamon J. Wall at (732) 530-9404 so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

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Respectfully submitted,


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